

Amendments to the Specification

Please delete the current section heading “DETAILED DESCRIPTION” before Paragraph 0002 of the application and insert in its place the following section heading: “BACKGROUND OF THE INVENTION”.

Please insert the new section heading “BRIEF SUMMARY OF THE INVENTION” before Paragraph 0007 of the application.

Please replace Paragraph 0007 of the application with the following amended paragraph:

[0007] ~~The object~~ One purpose of the invention is therefore to provide smart modules connected to the internal communications bus of a programmable controller, with direct access to the TCP/IP protocol in order to perform exchanges between them and exchanges on a TCP/IP network, without having to resort to a gateway at the application layer level which may prove to be costly. Further, by means of the TCP/IP protocol, the central processing unit module or the job modules of a programmable controller may directly use web protocols and architectures as for example the UDP, HTTP, XML, WAP, FTP, SMTP, SNMP, DHCP, DNS standards, etc . . .

Please insert the new section heading “BRIEF DESCRIPTION OF THE DRAWINGS” before Paragraph 0010 of the application.

Please replace Paragraph 0013 of the application with the following amended paragraph:

[0013] FIG. 4 illustrates the use of the routing of messages from a general network and an ~~IO~~ I/O network.

Please insert the new section heading “DETAILED DESCRIPTION” before Paragraph 0014 of the application.

Please replace Paragraph 0014 of the application with the following amended paragraph:

[0014] In FIG. 1, a modular programmable controller 50, responsible for controlling a process to be automated, comprises a central processing unit module 20 (CPU), a network module 10, a job module 30, an input/output (I/O) module

40 and an internal communications bus 5 connecting the different modules of the programmable controller 50 to each other. The number and the type of modules accepted in ~~an~~ controller 50 depend on the size and the power of this controller.

Please replace Paragraph 0036 of the application with the following amended paragraph:

[0036] Another possible architecture can be seen in FIG. 4. Here there is a network of ~~40~~ I/O modules 68', 68'' connected to an Ethernet subnetwork 67. These modules 68', 68'', through the use of the herein described invention, can be monitored, configured, or diagnosed from a remote location through the Internet 61 via the PLC 64. The message traffic could be sent through a smart Ethernet module 66 connected to the Internet 61, into the PLC backplane 63, to the Ethernet module 65 that manages the ~~40~~ I/O subnetwork 67, and to the ~~40~~ I/O module 68', 68'' on that subnetwork 67.

Please insert the following paragraph after Paragraph 0037 and before claim 1 of the application.

What is claimed is: